THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 62

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YASUHIRO SHIMOJIMA, GENJI MORI, TAKASHI YOSHIOKA, TOSHIO OZAKI, HIROYUKI HAMATO and ITSUO MAKINO

Appeal No. 95-4386
Application 08/127,139[1]

HEARD: June 7, 1999

Before HAIRSTON, BARRETT and FRAHM, Administrative Patent Judges.

FRAHM, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 4 to 9 and

[1]Application for patent filed September 27, 1993. According to appellants, the application is a continuation of Application 07/875,596, filed April 28, 1992, now abandoned, which is a continuation of Application 07/167,318, filed March 11, 1988, now abandoned. Appellants rely upon a Foreign priority filing date under 35 U.S.C. § 119 of June 1, 1987.

11 to 45, which constitute all of the claims pending in the application.[2]

BACKGROUND

The subject matter on appeal is directed to the field of underwater detection systems that detect underlying transient objects and underwater conditions (e.g., fish). As indicated in the specification (page 1), ship track data and underwater conditions are read out from memory units for display on an indicator. Appellants recognized that the prior art suffered from the problem that only present, as opposed to past, underwater conditions could be recalled in association with ship track data (specification, page 2). To overcome this problem, appellants provide an association means (see claim 16 on appeal and element 39 in Figure 2) which controls an indicator means 9 to display selected past ship track points along with their associated past underwater conditions and underlying transient objects. This assists fishermen in finding fish while aboard a ship by providing the ability to recall past ship track and fish data, thus aiding the fishermen in making a better guess as to the location of fish.

As further discussed, infra, we find that the applied references to Suzuki, Nagao, and Rogoff, as well as appellants' admitted prior art, each fail to individually teach or suggest at least

[2] Claims 1 to 3 and 10 were canceled in grandparent application number 07/167,318 as per appellants' amendment dated August 15, 1989.

the feature of recalling a past point on a ship's track and its associated underlying transient objects and underwater conditions as defined in the claims on appeal.

Representative independent claim 16 is reproduced below:

16. An underwater detection system for detecting underlying transient objects and underwater conditions comprising:

ship position measuring means for successively measuring a position of a ship and for producing position signals;

radiating means for successively radiating search signals into a body of water to search for underlying transient objects and underwater conditions;

receiving means for receiving echo signals, said echo signals being search signals reflected from the underlying transient objects and the underwater conditions;

first memory means for storing said position signals from said ship position measuring means;

second memory means for storing said echo signals representing the underlying transient objects and underwater conditions;

said radiating means and receiving means forming an active continuous real-time sonar system while the ship is operating;

reading means for reading the stored signals from said first and second memory means;

an indicator for displaying the stored signals from said first memory means to form a track of the ship, said track of the ship representing a plurality of points corresponding to past positions of the ship, for displaying a present position of the ship, and for displaying the stored signals from said second memory means to show underwater conditions and underlying transient objects corresponding to the present position of the ship on two corresponding portions of a display face of said indicator means, said display face being divided into two parts;

selecting means for selecting any past point along the track of the ship; and

association means for controlling said indicator means to display the past selected point of said track of the ship in one portion of the display face and to display underwater conditions and underlying transient objects corresponding to the past selected point in another portion thereof, thereby enabling a display of both past encountered underwater conditions and underlying transient objects and the selected past point along said track of the ship.

The following references are relied on by the examiner:

Nagao	4,400,780	Aug. 23, 1983
Rogoff et al. (Rogoff)	4,590,569	May 20, 1986
Suzuki Fish Finder ES-3314 (Suzuki) (Japanese)[4]		undated[3]

Claims 4, 7, 8, and 11 to 45 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Suzuki in view of Nagao and appellants' admitted prior art at page 2 of the specification.[5]

Claims 5, 6, and 9 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Suzuki in view of Nagao, appellants' admitted prior art at page 2 of the

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[3] We note that the Suzuki reference is undated, and that our review of the prosecution history reveals no objection by appellants as to the examiner's reliance upon Suzuki in rejecting the claims on appeal under 35 U.S.C. § 103. At the Oral Hearing held June 7, 1999, appellants' representative admitted that the date of the Suzuki reference antedated the application foreign priority date of June 1, 1987.

[4] We have been provided a translation, on which we rely, of this reference from the Translations Branch of the PTO Scientific Library. A copy was provided to appellants' representative at the Oral Hearing held June 7, 1999, in addition to being provided as an attachment to this opinion.

[5] We note that appellants' statement of this issue, issue number one, incorrectly omits appellants' admitted prior art from the statement of the rejection (see Brief, page 12). The examiner (Answer, page 2) also incorrectly affirmed this statement of issue number one. We note, as appellants' representative brought out at the Oral Hearing held June 7, 1999, that issue number one correctly includes reliance upon appellants' admitted prior art.

specification, and Rogoff.

Rather than repeat the positions of appellants and the examiner, reference is made to the Briefs and the Answer for the respective details thereof.[6]

OPINION

In reaching our conclusion on the issues raised in this appeal, we have carefully considered appellants' specification and claims, the applied references and admitted prior art, and the respective viewpoints of appellants and the examiner. As a consequence of our review of the record before us, we find that Suzuki, as well as the other applied prior art, fails to teach or suggest the feature of representative claim 16 on appeal of recalling and displaying selected past underwater conditions and underwater transient objects associated with past ship track points. Accordingly, we will reverse the examiner's decisions rejecting independent claims 4 to 9 and 11 to 45 on appeal as being obvious under 35 U.S.C. § 103.

Appellants argue that Suzuki and Nagao fail to teach or suggest storing past underlying transient object data and past underwater condition data (Brief, pages 17 and 21; Reply, pages 5, 6, 8, and 9). The examiner agrees (Answer, page 5), as do we. The examiner alleges (Answer, page 5) that such a

[6] We note that the Reply Brief has been "entered and considered" as per the June 28, 1995, communication from the examiner. We also note that the after final amendments of September 6, 1994, and of February 1, 1995, making minor corrections to claims 16 and 18 have been entered by the examiner.

feature would have been obvious since both Suzuki and Nagao store and display past ship track positions. Our careful review of Suzuki, Nagao, the admitted prior art, and

Rogoff fails to reveal any motivation or suggestion to store or display past underlying transient objects and/or past underwater conditions. Suzuki operates on past and present ship track data and present underlying transient objects and/or underwater conditions, but does not operate on past underlying transient objects and/or past underwater conditions. Nagao stores and displays past ship track positions, but does not operate on past underlying transient objects and/or past underwater conditions.

The examiner has also failed to cite any persuasive motivation for storing or displaying past underlying transient objects and/or past underwater conditions, other than to say that such would have been obvious because it would have been useful in finding fish or because historical information is generally useful (Answer, page 5). We agree with appellants (Brief, pages 18 to 20 and 21; Reply, pages 6 and 10) that there would have been no motivation for one of ordinary skill in the art to store or display past underlying transient objects and/or past underwater conditions and that to have done so would have involved the use of hindsight.

The primary purpose of appellants' disclosed invention is to find fish using past underlying transient objects and/or past underwater conditions, data previously not used in the prior art when attempting to find fish. Appellants attempt to overcome the difficulties with the prior art by storing and

displaying this past information either alone or with ship track and/or longitude/latitude data. This feature is positively recited in appellants' representative claim 16, as well as all other claims on appeal. To say that it would have been obvious to use past underlying transient objects and/or past underwater conditions to find fish, in light of references and admitted prior art which fail to teach or suggest such, is not plausible and would require recourse to appellants' disclosure, i.e., the use of hindsight.[7] To modify Suzuki to achieve appellants' claimed invention involves the application of knowledge and motivation not clearly present in the prior art. See In re Sheckler, 438 F.2d 999, 1001, 168 USPQ 716, 717 (CCPA 1971).

While the examiner asserts that using past underlying transient objects and/or past underwater conditions to find fish would have been within the level of skill of the ordinary artisan (Answer, page 9), the applied prior art fails to show such. The problem of needing past underwater object and/or conditions data to find fish was not recognized in the prior art. As correctly stated by appellants (Brief, page 22; Reply, pages 2 to 4 and 7 to 8), the use of such data in finding fish is not necessary in Suzuki (i.e., the prior art "taught away" from using such data). We conclude that there would have been no

[7] We note that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But when it takes into account knowledge and motivation gleaned only from the applicant's disclosure, and not only knowledge and motivation which was within the level of ordinary skill at the time the claimed invention was made, such a reconstruction is improper and is said to employ hindsight. See In re McLaughlin, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

motivation to modify Suzuki to achieve the subject matter of claims 4 to 9 and 11 to 45 on appeal.

In view of the foregoing, the decisions of the examiner rejecting claims 4 to 9 and 11 to 45 under 35 U.S.C. § 103 are reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)	
LEE E. BARRETT Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ERIC FRAHM Administrative Patent Judge	)	

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